National Institutes of Health
Office of Technology Transfer

siRNA, Aging, Stem Cells-related Technologies Available for Licensing

National Institutes of Health (NIH) Office of Technology Transfer
6011 Executive Boulevard, Suite 325 • Rockville MD 20852-3804
Phone: 301-496-7057 • Website: www.ott.nih.gov

INTRODUCTION

NIH has an extensive intellectual property portfolio of early-stage technologies[1] and also invests substantially in their development. Roughly 10 percent of the annual NIH budget is dedicated to intramural research and development activities -- resulting in inventions that form the basis of a variety of new medical technology and therapies in the areas of medical devices, software, vaccines, diagnostics, and reagents. Similar to university research, commercial partners are needed to make sure that the long hours at the lab bench and the public investment pay off in the end in marketed products.

NIH believes that innovative, early stage companies can play a significant role in the future development of leading-edge research. While the increasingly consolidated pharmaceutical industry remains a steady customer of research reagents and clinical collaborations with NIH, the more exciting therapeutic developments increasingly seem to come from NIH licenses signed with small and medium-sized life science companies early in their growth phase.

To further attract such early-stage concerns and start-ups, NIH affords creative treatment to small firms and tries to provide IP agreements that facilitate new areas of product development based upon NIH research. For example, financially-burdened smaller companies can benefit from flexibility on patent costs and license execution fees in license agreements. Of particular note for venture-backed firms is that companies do not give up equity or management control nor are their future development or marketing rights compromised by signing NIH license agreements. Finally, once the product is in development, NIH has the capability to assist with clinical trials, follow-on research collaborations, and even eventual purchase of the product as a customer.

We have collected some medical technologies your company might be interested in for further discussion with our licensing managers.

Once you have picked the technology of interest, we urge you to apply for a License. A copy of the License Application template can be found at the NIH OTT website at: http://www.ott.nih.gov/forms_model_agreements/forms_model_agreements.aspx

[1] *The NIH Office of Technology Transfer cannot guarantee that the listed technologies are still available for licensing. Please contact the Licensing and Patenting Manager (listed under each technology) for the current status and for other complementary technologies.*

Biomarkers for siRNA, Aging, Cancer Stem Cells

Ref No.	Title
E-092-2008	Novel Oligonucleotides for Treatment of Human Cancer
E-071-2003	Rapid and Sensitive Detection of Nucleic Acid Sequence Variations
E-033-2008	Therapeutic Applications of a p53 Isoform in Regenerative Medicine, Aging, and Cancer
E-314-2008	Inflammatory Genes and MicroRNA-21 as Biomarkers for Colon Cancer Prognosis
E-176-2008	Differentiation of Human Embryonic Stem Cells into Dopaminergic Nerve Cells
E-182-2007	Methods for Promoting Stem Cell Proliferation and Survival
E-038-2009	C57BL/6J Embryonic Stem Cell Lines Generated Using Serum-Free Media
E-051-2008	A Novel and Efficient Technology for Targeted Delivery of siRNA
E-278-2007	Attenuated Salmonella as a Delivery System for siRNA-Based Tumor Therapy
E-033-2008	Therapeutic Applications of a p53 Isoform in Regenerative Medicine, Aging, and Cancer

E-068-2007	Novel Roles of a DNA Repair Protein, DNA-PKcs, in Obesity, Neurological Function, and Aging
E-261-2007	Mouse Embryonic Stem Cell-based Functional Assay to Evaluate Mutations in BRCA2
E-056-2008	Treatment and Prevention of Age-Related Macular Degeneration and Other Eye-Related Diseases
E-005-2004	Biomarkers That Allow The Prediction Of Responder- And Non-responder Status To Interferon-beta In Multiple Sclerosis (MS)
E-106-2005	Detection Of Colorectral And Serum Protein Profiling
E-125-2002	Methods Of Diagnosing Protential For Developing Hepatocellular Carcinoma Or Metastasis And Identifying Therapeutic Targets
E-064-2005	Molecular Targets For Diagnosis And Therapy Of Cancer And Tissue Injury And Uses Thereof
E-075-2003	Use Of Cripto-1 And Its Expression In The CNS As A Biomarker For Neurodegenerative Diseases
E-118-2005	A Gene Therapy To Treat Lung Cancer
E-138-2005	Packaging And Highly Efficient Delivery Of SiRNA *In vitro* Using SV40 Pseudovirus

E-018-2005	Methods For Treating Beta-Catenin Splice Variant Related Cancers Using beta-Catenin Splice Variants
E-114-2003	Inhibition Of HIV-1 Replication In Human Macrophages By Antisense P21 (CDKN1A) Oligonucleotides And 2-Cyano-3, 12-dioxooleana-1, 9-dien-28-oic Acid (CDDO)
E-142-2005	A Single Ribozyme to Catalyze both Trimming and Transacting Catalysis - Potential Therapeutic for HPV Infection and Cervical Cancer
E-326-2002	Triplex Hairpin Ribozyme
E-230-1997	Human Papilloma Virus Inhibition By Antisense Oligonucleotides
E-192-2004	Compositions and Methods for Diagnosis and Treatment of Chemotherapy-Resistant Neoplastic Disease
E-121-2004	A New Antiviral Pathway that is Responsible for Viral Clearance: Modulation of ADAR1 Activities Enhance Antiviral Therapies and Virus Infection of Tissue Culture Systems
E-174-2000	Effect of COMT Genotype on Frontal Lobe Function
E-063-2003	Adoptive T Cell Therapy Using Rapamycin-Resistant, CD28 Co-Stimulated Th1/Th2 And Tc1/Tc2 Cells
E-122-2006	The Discovery Of A Previously Uncharacterized Gene Whose Expression Is Restricted To Renal Cell Carcinoma (RDD) Cells

E-239-2005	Notch Activation Promotes Stem Cell Survival In Vitro And In Vivo